

By email to usarmy.picatinny.ardec.list.pica-freedom-of-information-act@mail.mil
with US Postal Service Mail hard copy to:

OSD/JS FOIA Requester Service Center
Office of Freedom of Information
1155 Defense Pentagon
Washington, DC 20301-1155

Commander
ATTN: Freedom of Information and Privacy Act Office(ers)
Picatinny Arsenal, NJ 07806-5000

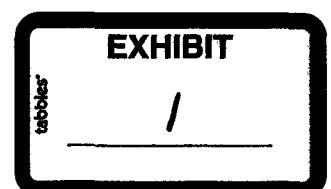
Dear FOIA and Privacy Act Officer(s),

August 15, 2013

This is a request under the Freedom of Information Act (FOIA) and the Privacy Act, 5 U.S.C. § 552 ("*FOIA Request*").

Army SBIR solicitation Topic A121-005 sought nanosilicon powder at \$25 per kilogram as a critical need as a substitute for nanoaluminum energetic powders for munitions and propellants. The Army rejected my proposal A121-005-1162 for "Manufacture Of 1) Very Low Cost And 2) Extremely Low Cost Nanosilicon Energetics", for offering to sell \$500,000 of nanosilicon powder for \$5,000 at the solicitation-specified price, but accepted proposals for higher-cost technology which did not even offer to commercialize by actual sale of nanosilicon powder to the Army at the solicitation-specified price. The Army refused high-energy materials of my proposal at very low product cost, but accepted lower-energy powders at higher product cost. Why would the Army do this in competitive bidding? This FOIA Request is to obtain records which might explain such noncompetitive, high-cost Army contracting behavior. One possibility is that the lower-energy, higher-product-cost contract awards went to firms because they might have been personally known to ARDEC evaluation personnel, and/or which had prior funding or collaboration relationships with ARDEC. "Industry" also provides funding to and collaboration with ARDEC, which might have affected Army contracting awards. In this regard, an Army news article at <http://www.army.mil/article/46340/> confirms extensive collaboration with, and funding from, "industry":

"We take theory from universities or small businesses that do the research, and we transition them into promising technologies." The ARDEC is at the forefront of nanotechnology, even within private industry. In fact, [Darold] Martin noted that **many industry partners provide funding to ARDEC** to continue research in the nano field. As with any new technology, keeping the product at a reasonable cost is always a challenge. "It's such a new technology, so we can't bring the manufacturing costs down yet. We have to re-tool our facilities to be able to mass produce a lot of this stuff," Martin said. "If it was easy, it would be done already," he added. "It's sort of like baking, in that there is an art to it, you can't always tell why certain things work exactly right together, but



when they do, you know it." [emphasis supplied]

The Air Force rejected a recent SBIR proposal F131-103-1990 for "Inexpensive Tonnage Production of Air-Stable, Core-Shell Detonating Nanonergetics" submitted to Air Force SBIR Topic 131-103 ("1990" Proposal) by claiming that the Army had been using my proposed technology for years. I asked questions about this rejection reason because I do not believe the Army has had my proposed technology for years, but the Air Force has refused to support their rejection claim. So, this request is also to obtain records relating to the Army equipment and technologies cited by the Air Force.

This request is also made because I believe, based on my personal and professional experience, that the DoD SBIR program is being used to wrongfully fund pre-favored proposers and/or technology known to proposal evaluators, including the use of selection criteria not disclosed to unconnected bidders/proposers (eg, crony funding). I believe that proposals which are not "connected" or "pre-favored" are wrongfully and inconsistently evaluated to reduce their scores, and to eliminate them from award. Such behavior is not only improper for public bidding, but also wastes enormous small business resources and effort. There were many Proposers, including me, to Army SBIR Topic A121-005 seeking cheap \$25 per kilogram nanosilicon energetic powder as a substitute for nanoaluminum energetic powder. To the extent this DoD Topic was written to favor, or intended to fund, pre-favored proposer(s), and/or wrongful and inconsistent evaluation criteria were used to reject "unconnected" proposers, the work and effort of the rejected small business proposers was knowingly and willfully solicited and/or wasted by DoD. For example, my proposal A121-005-1162 to Army SBIR Topic A121-005 took 2-3 weeks to write, and longer to innovate. It was wrongfully rejected for the claimed "*weakness*" of actually offering to make and sell very powerful nanoenergetics which the Army admitted would meet the Topic bid specifications, directly to the Army at the \$25 per kilogram "critical need" specification price, upon Phase I development. I have now learned that despite rejecting my proposal for the alleged "*weakness*" of offering to actually commercialize by making and selling Topic material at the solicited \$25/kg price, the Army funded a proposal to a company connected to a prime DoD contractor which would only have a "5kg/day production rate at a cost of \$185/kg" at the end of Phase I. The simple phase I equipment (easily scalable to tonnage production) of my proposal would produce up to 10 pounds per *hour* at less than \$25 per kilogram, as justified by raw material and literature costing described in my proposal, and was easily scalable to tonnage production. Even at the end of Phase II, this funded proposal selected by the Army would only have an alleged "path" to production at a cost "nearing \$50/kg", which is much more than the \$10 or less per kilogram cost of my proposal for an even more powerful nanosilicon energetic substitute for nanoaluminum in explosives and propellants. The Army claimed that production and actual offer for sale at \$25/Kg was a "*weakness*" to reject my proposal, but that production at a cost of \$185/Kg was a "*strength*" for award of to Systems and Materials Research Corporation. The Army also rejected my proposal for the claimed "*weakness*" of *optionally* proposing an even more powerful nanosilicon energetic, which could include carbon and boron from *extremely cheap raw materials*. But the Army instead funded a proposal which uses a ***VERY expensive raw material (silane, SiH₄)*** which prevents production at the \$25 or \$10 per kilogram cost of my proposal, and which includes carbon and fluorine "impurities" (my powders can also have a fluorine-containing coating). My very inexpensive, more powerful nanosilicon energetics at less than \$10/Kg were claimed to be a "*weakness*" for rejection of my proposal because of powerful "impurities", but very expensive nanosilicon

powders containing carbon and fluorine “impurities”, made from extremely expensive raw materials was a “strength” for award to a much higher product cost proposal. This is clear evidence of bias and distorted evaluation, which was practiced and fully accepted in the DoD SBIR Program despite notice. It also appears that Army SBIR selection criteria are intentionally distorted to favor proposals which are connected to large “prime” contractors. It does not appear either proposal actually selected by DoD for Army Topic A121-005 award offered to actually sell any cheap nanosilicon to the Army at \$25 per kilogram at the end of Phase I or Phase II. My proposal was MUCH cheaper (as supported by actual raw material and literature cost calculations). It was an excellent proposal which the Army admitted met all the original Topic bid specifications. Without any legitimate substantive reasons, the Army made up reasons to reject my “unconnected” proposal. The Army rejected the proposal by claiming proposal *“weaknesses”* of commercializing by offering to actually sell the product to the Army at the end of Phase I at *too cheap a price which was much lower than their favored proposers*, and because a product we offered was *too powerful for the Topic goal of replacing nanoaluminum in powerful explosives and rocket fuels*. These *“strengths” were mis-scored as “weaknesses” to reject a proposal fully meeting the solicitation, to award contracts to proposals which did not meet the primary \$25/kilogram critical need cost specification*. The Topic claimed it wanted cheap nanosilicon powder to replace nanoaluminum energetics, but the Army actually wanted to pay much more to its favored bidders. This behavior demands investigation and public dissemination.

The Army evaluators also awarded and scored what may be a magnesium-silica combustion process as “innovative”, despite such work being previously developed and published. While the Army cited a less-relevant silicon carbide paper as prior art in Topic A121-005, it is notable that the Army did *not* cite a much more relevant contemporaneous silicon powder paper by the same author, “Combustion Synthesis of Silicon Nanopowders”, International Journal of Self-Propagating High-Temperature Synthesis, 2010, Vol. 19, No. 2, pp. 94–101 (2010).

I request that a copy of the following document(s) and other records be provided to me:

1. All records relating to review, evaluation, scoring, or rejection (“non-selection”) of my SBIR proposal SBIR Proposal A121-005-1162 To Army Topic A121-005 for “Manufacture Of 1) Very Low Cost And 2) Extremely Low Cost Nanosilicon Energetics. Requested records include, but are not limited to, any reasons or justification for non-selection, or scoring any portion of these proposals with less than the maximum score.
2. Evaluations of all proposals submitted to Army SBIR Topic 121-005, showing the numerical scoring and written evaluation of each evaluator, with the specific technology of each proposer redacted, and the names of the evaluators redacted, but with each evaluator having the same evaluator number for statistical analysis. While the specific technology of proposers should be redacted, nontechnical language used to evaluate and/or reject proposals such as reference to “needs” or “goals” met, or not met, should be produced.
3. All records relating to the origin, drafting, purpose, modification, release or publication of Army SBIR Topic A121-005, including the source or sources of its subject matter, selection criteria or goals, including but not limited to the \$25 per kilogram specification, the purity

specification, and any other goals referred to in rejection my proposal. Such Topic subject matter sources may include but are not limited to communications (such as "White Papers", technical proposals or marketing) with or from David J. Irvin, Systems and Materials Research Corporation (an awardee of Army SBIR contract W15QKN-12-C-0083 for Topic 212-005), DoD prime contractor partners ATK (Alliant TechSystems, Inc.) or Esterline Corporation; or Edward J. Salley, or Physical Sciences Inc, potential proposers, or others at any time after January 1, 2009. This request also includes records relating to topic draft changes prior to topic approval, and communications with any third party or potential proposer about such subject matter, the origination, drafting, modification of the 005 topic, or knowledge that such a topic might have been submitted or be published as an SBIR solicitation, before its public release.

4. All communications or other records after January 1, 2009, of Army personnel or agents (particularly including personnel participating in or responsible for origination, drafting, management, proposal review or proposal selection for Army SBIR Topic A121-005) with any awardee, subawardee or commercialization partner at any time prior to the last date of contract award for this Topic. This request includes, but is not limited to, reports, memos and email relating to meetings, phone calls and technology conferences, technology plans, and trip reports of the evaluators or Topic TPOCs.

5. All visitor log or phone log entries at Picatinny Arsenal for calls/visits/visitors from David J. Irvin, Edward J. Salley or personnel from Systems and Materials Research Corporation (an awardee of Army SBIR contract W15QKN-12-C-0083 for Topic 212-005) or its DoD prime contractor partners ATK or Esterline Corporation, or Physical Sciences Inc. or its commercialization partner(s) at any time from January 1, 2010 to the time of contract selection. This request includes but is not limited to calls/visits to Joseph Paras, Deepak Kapoor or the Picatinny nanotechnology facility.

6. All records describing or relating to thermal spray equipment, plasma equipment, nanoparticle collection equipment, gas recycle equipment, and related technologies of the Army, such as referred to by the Air Force in rejecting my "1990 Proposal".

7. All records listing or otherwise relating to any collaboration with, or funding of, ARDEC by industry in the nano field or the energetics field at any time after January 1, 2005. This includes funding by industry such as identified by Mr. Darold Martin, as quoted above. This includes CRADAs or other collaboration. This request particularly includes but is not limited to collaboration with or any funding to ARDEC by Systems and Materials Research Corporation (an awardee of Army SBIR contract W15QKN-12-C-0083 for Topic 212-005) or its DoD prime contractor partners ATK or Esterline Corporation, or Physical Sciences Inc. and subcontractors or commercialization associate of Physical Sciences, Inc. relating to the proposal for and Contract W15QKN-12-C-0082 for Army SBIR Topic A121-005, or UES, Inc. (awardee of Army contract W15QKN-12-C-0112 for Army SBIR Topic A121-012) or TDA Research, Inc. (awardee of Army contract W15QKN-12-C-0099 for Army SBIR Topic A121-012).

8. All records citing or otherwise relating to the subject matter of "Combustion Synthesis of Silicon Nanopowders", International Journal of Self Propagating High Temperature Synthesis, 2010, Vol. 19, No. 2, pp. 94-101 (2010) by Zh. Yermekova, Z. Mansurov, and A. S. Mukasyan.

The records may include "White Paper" or other communications with prospective or actual SBIR proposers to the originators or approvers of Army SBIR Topic A12-005. This includes all records relating to solid state reaction of magnesium with silica, SiO₂ or sand to form silicon prior to contract award for Army SBIR Topic A121-005.

9. All records relating to policy, practice or quality control to make sure that SBIR Topics are not created, originated, modified, drafted, directed or preferred for preselected or preferred proposers, proposals or technology. This request includes, but is not limited to, records relating to preventing preference or advantage for previously funded proposers, proposers who have communicated with or marketed to the Army with respect to subject matter of a Topic prior to release of the Topic to the public, or proposers personally known to proposal evaluators. This request also includes records relating to quality control to prevent use of selection criteria not fully and completely disclosed in the SBIR specifications for selection or nonselection of proposals.

10. All records relating to criteria for scoring SBIR proposal commercialization, and any difference in scoring for proposals based on prime contractor or other association vs. commercialization/sale directly by the small business proposer. This request includes any criteria which could permit higher scores for proposals based on a pre-existing relationship with a large, "prime" Department of Defense contractor or other commercialization partner, than for small business proposals which offer to develop and make products or service themselves, or offer to sell a product or service to directly to DoD. (Is there a DoD anti-small business "bundling" commercialization requirement to get the highest SBIR/STTR commercialization score, or is the "Hewlett Packard/Apple startup route equally permissible?).

11. All data, studies, inquiries, protests, complaints, audits and other records relating to:

- (a) any scoring of SBIR proposals by SBIR proposal evaluators of those they personally know, have communicated with or are otherwise connected with, differently or higher than SBIR proposals of those they don't know, have not communicated with, or are otherwise not connected with,
- (b) consistent or inconsistent scoring of proposals to SBIR Topics by individual SBIR evaluators,
- (c) consistent or inconsistent scoring by different SBIR Topic evaluators for the same SBIR proposal, or
- (d) whether or the extent to which inconsistent, different or biased SBIR evaluator scoring of SBIR proposals may be done to eliminate proposals from award consideration, to favor a pre-connected proposer known to the evaluator(s).

12. All records describing or otherwise relating to whether an SBIR/STTR Topic is "wired", has one or more pre-favorites, is intended for or directed to one or more potential proposers which have been previously funded by DoD, or is based on non-public technology previously communicated between DoD and a potential proposer or a prime contractor associated with a potential proposer. This request includes records relating to help or training for proposers to help them recognize and avoid "wired" SBIR solicitation topics. The importance of determining and avoiding SBIR Topics which are "wired" was described to SBIR Conference attendees,

including me, to help “unconnected” proposers not waste their time. DoD should have internal quality-control mechanisms to make this determination, in any event.

13. All records relating to Army or DoD policies, practices or disciplinary measures to limit, prevent or correct biased, distorted or inconsistent SBIR/STTR proposal scoring or evaluation by rogue, biased or incompetent evaluators or reviewers. This request includes, but is not limited to, such scoring for the purpose of crony funding.

14. All records listing, naming or referring to me, James J. Myrick (James Myrick, Jay Myrick), my email address jaymyrick@comcast.net , my company Hard Sciences Corporation, or US Enginewing. This request does **not** include records which I sent to DoD or which DoD sent addressed to me. A pending FOIA/PA request was sent to DoD and the Air Force in May 2013, so **this request only covers records not produced** in response to that earlier request.

To assist in locating records, John Smith was listed as Army SBIR Program Manager, US Army Research, Development, and Engineering Command (RDECOM) (703) 399-2049. Joseph Paras 973-724-4686 joseph.paras@us.army.mil and Deepak Kapoor 973-724-2596 deepak.kapoor@us.army.mil are listed as TPOCs for Army SBIR Topic A212-005. Paul Redner paul.redner@us.army.mil and Erika Rivera Erika.a.rivera@us.army.mil, TOPCs for Army SBIR Topic A12-012 which also relates to nanoenergetics, may also have, or know about, such records. Jessica Stogner, Contract Officer, Adam M. Fontana adam.fontana@us.army.mil and Carol L'Hommedieu carol.j.lhommedieu@us.army.mil also may have records relating to this request. Mr. Darold Martin of ARDEC likely has knowledge of collaboration and funding by “industry”. The Air Force evaluators of my “1990 Proposal”, and Mr. Michael Rivera Michael.Rivera@eglin.af.mil should have full knowledge of the records relating to the Army equipment and technologies cited by the Air force and sought by this request.

It should be fairly easy to search for these records in email and other DoD records. Because “White Paper” communications and marketing to DoD personnel may have been deleted from personal files, it is requested that backup records be searched. In addition to checking with personnel involved in the subject mater of the requests, this is easily done by computer search for TPOC or proposer name and/or other relevant search terms.

I request a fee waiver. In order to help you determine my status for the purpose of fee waiver or assessing fees, you should know that I am a US citizen, and that this request is made as part of newsgathering and factgathering for public dissemination, and not for commercial use. I am an individual seeking information to write one or more papers for publication about the conduct of the DoD SBIR program, and not for a commercial use (I do not even plan to sell the papers). Possible titles include “Anatomy of SBIR Funding Preferences” or “Distortion of SBIR evaluation criteria for crony funding”. The publication venue could be that of an old American Bar Association cover article of mine. Other journals could be better for focus on waste, fraud, “wiring” or other improprieties or abuse. I am also considering starting a public website for “unconnected” SBIR proposers to post SBIR rejection reasons and other evaluation behavior, so a historical database will be available, and so that “unconnected” small businesses are less disadvantaged by their small size and lack of “connections” to DoD for contract award preference purposes. The accompanying letter from the InnovationPAC evidences the public

importance of issues of wrongful SBIR evaluation of competitive contract bids which meet bid criteria. The InnovationPAC has been an independent organization representing and supporting some 14,000 innovators and entrepreneurs within the SBIR community. The public importance of these issues fully supports fee waiver in the public interest. I am protesting and seeking investigation of Army and Air Force nanoenergetic contracting behavior by GAO for publication purposes, but am not seeking a nanoenergetic powder contract for myself or company.

Disclosure of the requested records is in the public interest because it is likely to contribute significantly to the public understanding of the operations or activities of the Department of Defense in spending SBIR funding, and is not primarily in my commercial interest. Public knowledge of wasteful, biased, distorted and wrongful evaluation of government contract bids, and awards to high-cost bids over low-cost bids is extremely important to the small business community. Based on personal experience such as that described above and other bizarre rejection reasons, I have concluded that the DoD SBIR Program is being misused to fund pre-favored proposers while disregarding cost to taxpayers – *the “DoD \$800 hammer” issue*. I believe that small business proposers who are not “connected” to DoD, DoD “prime contractors” or DoD proposal evaluators are subjected to wrongful evaluation, for the purpose of awarding SBIR funds to pre-connected or crony proposers. This pattern of pre-selection includes basing SBIR Topics on undisclosed communications with potential proposers in solicitation origination, withholding of information about actual selection criteria from “unconnected” proposers, inclusion of criteria in Topics which are unnecessary or even adverse for the Topic purpose or goals, bizarre wrongful rejection reasons not uniformly applied to favored proposals, and/or favoritism for proposers that have a pre-existing connection or relationship with one or more large “prime” defense contractors.

If my fee waiver request is properly denied (subject to appeal), I agree to pay fees for this request up to a maximum of \$500 (five hundred dollars) for the FOIA request, and up to \$100 (one hundred dollars) for the Privacy Act request. If you estimate that the fees will exceed these limits, please inform me first, and advise me of the fee amount for each of the request items.

My telephone number and email at which I can be contacted if necessary to discuss any aspect of my request are listed below. (I don’t have a FAX)

Respectfully,

James J. Myrick
748 Greenwood Avenue
Glencoe, Illinois 60022
jaymyrick@comcast.net 847-337-9305



July 31, 2012

The Honorable Gene L. Dodaro
Comptroller General
Government Accountability Office
441 G St., NW
Washington, DC 20548

C: James Myrick, protester
Re: GAO Protest B-406970

Comptroller General Dodaro,

InnovationPAC is an independent advocacy voice representing and supporting some 14,000 innovators and entrepreneurs within the SBIR community. We are a voice for, and supported by, SBIR innovators. Issues in the above protest could broadly and adversely affect commercialization and innovation by the SBIR community, and have a detrimental effect on a program that is an essential driver of America's global technology leadership and domestic high-tech job creation.

The Proposer has raised specific allegations that raise general concerns for the SBIR community, and ought to be addressed with respect to those concerns.

1. Proposer allegedly offered to sell the critically needed, topic-specific energetic fuel product to the Army for \$5,000, which the solicitation indicated costs the Army on the order of approximately \$500,000. The offer to produce and sell the desired product to the Army at approximately 1% of current cost was designated a weakness in the proposal leading to its rejection. Can an agency reject an SBIR proposal for the claimed "weakness" of quickly transitioning from Phase I SBIR technology development to commercial sale which the soliciting agency desires at the lowest price as sought by the agency? Does such a rejection violate the fundamental commercialization goals of the SBIR program?

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2. Proposer allegedly met all the metrics of the original solicitation Topic, and proposed a far less expensive product that better met the specified needs of the agency for the stated energetic fuel purpose of the solicitation Topic. In essence, the rejection of the SBIR proposal appears to have been based on the claimed “weakness” of proposing a cheaper and more powerful desired product – namely the energetic fuel product – or else on some other, unstated reasons or criteria not disclosed in the SBIR Topic solicitation. Does it violate a fundamental SBIR purpose of supporting small business innovation, for an agency to reject such a proposal which meets the metrics of the original solicitation Topic, based on unstated requirements not in the original solicitation?

We take no position whatsoever on the accuracy of the protest allegations and the merits of these issues. But we submit that these issues are of broad and fundamental importance to the SBIR procurement system, and the SBIR community which we represent and support, and should be decided in a fair and transparent manner.

Regards,

Dan Backer, Esq.

Innovation PAC Treasurer

@InnovationPAC // 202-210-5431 // www.InnovationPAC.org

Innovation PAC

A Political Action Committee for SBIR Innovators

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